



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/616,630

07/09/2003

Tsung-Kan Cheng

2001035

3400

7590

05/17/2004

Keith Kline  
PRO-TECHTOR INTERNATIONAL SERVICES  
20775 Norada Court  
Saratoga, CA 95070-3018

EXAMINER

FUNK, STEPHEN R

ART UNIT

PAPER NUMBER

2854

DATE MAILED: 05/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/616,630

**Applicant(s)**

CHENG, TSUNG-KAN

**Examiner**

Stephen R Funk

**Art Unit**

2854

AW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

The disclosure is objected to because of the following informalities: On page 7 line 1 "surrounded" should be --surrounding--, on page 7 line 6 "to fixedly located" should be corrected, on page 8 line 12 "Fig. 3" should be --Fig. 4--, on page 12 line 2 "while prevents" should be corrected, on page 12 line 9 "not prevents" should be corrected, and on page 13 lines 9 - 10 "have not any" should be corrected. Appropriate correction is required.

Claims 1 - 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, page 15 lines 23 - 24, it is positively recited that the flat locating sheet of the elastic-cup support is "located on" said membrane-type switch circuit board which is only inferentially recited in the preamble in lines 6 - 7. Furthermore, note that the preamble is only to "An elastic-cup support" and not the circuit board. Therefore, it is not entirely clear whether applicant is claiming only the elastic-cup support or the elastic-cup support in combination with the circuit board. Since the preamble only sets forth an elastic-cup support, the claims will be examined with respect to the prior as if only the elastic-cup support is positively claimed in the body of the claim 1. However, it is applicant's responsibility to clarify the scope of the claim and amend it accordingly.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2854

Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Suganami (US 6,236,003). Suganami discloses an elastic cup support comprising a flat locating sheet (53) with receiving holes (53e) provided with an upward projected wall portion (Figure 10). See column 1 line 18+ of Suganami. With respect to claim 5 note the radially inward projected lug at the upper edge of the wall portion (note the lead line for reference numeral 53e in Figure 10).

Claims 1, 2, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyakoshi (US 6,355,894). Miyakoshi discloses an elastic cup support comprising a flat locating sheet (8) with receiving holes provided with an upward projected wall portion (81). See column 5 line 47+ of Miyakoshi. With respect to claim 2 see Figure 6 of Miyakoshi. With respect to claim 5 note that the upper edge of the receiving holes have a radially inward projected lug (column 5 lines 50 - 51).

Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamada et al. (US 6,064,020). Yamada et al. disclose an elastic cup support comprising a flat locating sheet (15) with receiving holes (15f) provided with an upward projected wall portion (15e). See column 4 lines 31 - 44 and Figure 2 of Yamada et al. With respect to claim 3 note that the wall portions (15e) are discontinuous forming notches where the wall portions are not present.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note Figure 9 of Nozawa et al. ('724) and Figure 3 of Su ('798).

Claim 4 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Art Unit: 2854

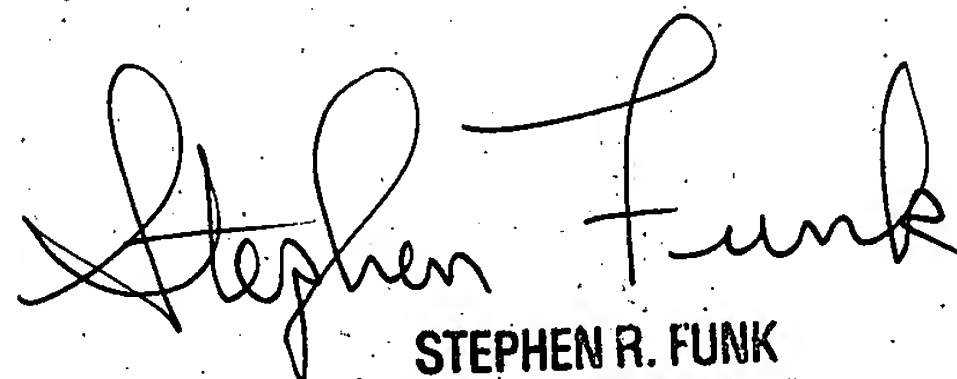
The following is an examiner's statement of reasons for allowability: Neither Yamada et al. or the prior art of record teach inwardly extending lugs in the notches of the wall portion as recited in claim 4. Note that the notches of Yamada et al. cannot have any inwardly extending lugs to the extent of the notches.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen R. Funk whose telephone number is (571) 272-2164.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Hirshfeld, can be reached at (571) 272-2168.

The fax phone number for ALL official papers is (703) 872-9306. Upon consulting with the examiner *unofficial* papers only may be faxed directly to the examiner at (571) 273-2164.

SRF  
May 12, 2004



STEPHEN R. FUNK  
PRIMARY EXAMINER